

Pathological gambling: Update on assessment and treatment

By Timothy W. Fong, MD

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CALIFORNIA -- Dr Fong is assistant clinical professor of psychiatry at the UCLA Gambling Studies Program, Semel Institute for Neuroscience and Human Behavior at UCLA. He reports that he has no conflicts of interest concerning the subject matter of this article.

Surveys show that approximately 60% of the general population has gambled within the past 12 months.¹ The majority of people who gamble do so socially and do not incur lasting adverse consequences or harm. Beyond this, approximately 1% to 2% of the population currently meets criteria for pathological gambling.² This prevalence is similar to that of schizophrenia and bipolar disorder, yet pathological gambling often goes unrecognized by most health care providers.

Screening and treatment for pathological gambling—otherwise known as compulsive gambling, gambling addiction, or disordered gambling—is not generally taught in medical school, during psychiatry residency, or during training for mental health or substance abuse counselors. As a result, clinicians may not recognize the signs and symptoms of pathological gambling and may lack the training and experience to provide state-of-the-art treatment.

Diagnostic issues

DSM-IV lists pathological gambling in the section on impulse control disorders. There is an ongoing debate as to where to include pathological gambling in DSM-V. One viewpoint is to include pathological gambling as an addictive disorder because both conditions share core features—namely, loss of control in the face of adverse consequences.³ Another possibility is to view pathological gambling as an obsessive-compulsive spectrum disorder because of the shared symptoms of preoccupation; tension; and repetitive, almost ritualistic behaviors.⁴ Finally, pathological gambling may be viewed as a stand-alone impulse control disorder with unique characteristics, disease course, and pathophysiology.

According to current DSM-IV criteria, pathological gambling is characterized by continued gambling despite harmful consequences. Some of the cardinal symptoms include preoccupation with gambling, tolerance (need to increase the size of bets), loss of control, inability to cut down, and lost opportunities as a result of gambling. Criteria that are specific to pathological gambling include chasing losses, committing illegal acts to finance gambling, and having others pay gambling debts.

Problem gamblers are considered those who meet 1 or more of the diagnostic criteria for pathological gambling but less than 5. This is similar to substance abuse in that the gamblers' lives are being harmed by gambling, but full criteria are not satisfied.

Most clinicians can recognize signs and symptoms of gambling addiction, but screening is not routine. There are several validated, simple screens for pathological gambling (Table 1) that can be used in different languages, as well as a quick 2-question (Lie-Bet) tool that can be used.⁵ Frequent screening for pathological gambling is recommended. Patients in substance abuse treatment settings have been known to switch addictions during the recovery process.

Most pathological gamblers do not present with a chief complaint of "being addicted to gambling." Research has shown that only 10% of pathological gamblers present for treatment.⁶ Presenting symptoms can be vague and might include commonly seen problems, such as insomnia, stress, depression, anxiety, or interpersonal problems. Since pathological gambling is a hidden addiction that cannot be detected by physical examination, the use of screening tools is essential.

Clinical characteristics

The course of pathological gambling can vary from a chronic relapsing condition to one with a short time course.⁷ Vulnerable groups include males; persons with comorbid psychiatric disorders, especially substance abuse, attention-deficit/hyperactivity disorder, and antisocial personality disorder; the elderly; adolescents; the disabled; and those with low socioeconomic status.^{8,9} Pathological gambling has been shown to be a condition with high genetic transmission and heritability.¹⁰ It is unclear what is being genetically inherited, although the trait for risk-taking preference, absence of loss aversion, or sensitivity to immediate rewards may be responsible.

The consequences of pathological gambling vary with each case and can range from financial loss, divorce, substance abuse, domestic violence, lost time/productivity, and illegal activity. Suicidal ideation is common in pathological gamblers, affecting nearly 25% of this population.¹¹ In addition, the medical consequences of pathological

gambling are also being recognized—insomnia, sleep deprivation, lack of exercise, stress-related illnesses, and decreased attention to self-care have all been seen clinically in pathological gamblers.

Recently, attention has been drawn to the association between Parkinson disease, use of dopamine agonists, and pathological gambling. Although definitive scientific causality has not been established, there is compelling evidence to suggest that pathological gambling behaviors that were not previously evident may develop in a subset of individuals with Parkinson disease who are taking dopamine agonists.¹²⁻¹⁴ This association implicates a role for the dopamine reward pathway in the development of the disease and informs clinicians of the need to screen for pathological gambling in this population.

Treatment approaches

No single treatment approach has been shown to be most beneficial for pathological gamblers. Most gambling treatment programs recommend an integrated biopsychosocial perspective that involves as many collateral participants as possible. The current body of research evidence is stronger for psychotherapeutic approaches than for pharmacological approaches.

Psychotherapeutic approaches. Evidence-based psychotherapies for pathological gambling include cognitive-behavioral therapies (CBT), brief interventions, motivational enhancement, and 12-step support groups.

Brief interventions for pathological gambling include either single or limited sessions that target gambling and also include the use of self-help workbooks and telephone counseling.^{15,16} Recent work by Petry and colleagues¹⁷ indicates that a single 10-minute informational session or a single 1-hour motivational enhancement interview reduces problem gambling behaviors. Brief interventions with self-help workbooks are also emerging as effective ways to reduce problem gambling behaviors.¹⁵

Individual psychotherapy is most widely used to address pathological gambling. Compared with other psychotherapies, CBT has the most evidence for the management of pathological gambling.¹⁸

Several recent studies highlight the importance of targeting cognitive distortions and irrational beliefs associated with continued gambling.¹⁸ Individual therapy reduces gambling frequency, increases perceived self-control over gambling, and strengthens

relapse prevention. For therapists interested in using CBT for pathological gamblers, clinically tested manuals and guides are available.^{19,20} A recent meta-analysis of CBT for pathological gambling suggests that the effect size is promising and that the effect of reduced pathological gambling behavior extends to at least 12 months.¹⁸

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Social support through Gamblers Anonymous is often recommended for pathological gambling. Gamblers Anonymous has been in operation for more than 50 years; meetings are held daily throughout the United States. Gamblers Anonymous offers peer support, fellowship, and a confidential network to support recovery. Variables that predict abstinence include attendance, participation, and higher social status.^{19,20}

Practical techniques to use with pathological gamblers include discussions of how to limit access to casinos, credit, and transportation to gambling venues. Financial counseling is an essential component in working with pathological gamblers—an area that many therapists find challenging, since they lack formal training. Finally, engaging family members early in treatment is critical to foster treatment retention and adherence, and to minimize enabling behaviors.

Common pitfalls in treating pathological gamblers include nonadherence to therapy, ambivalence, and low motivation. Shame and guilt are palpable in pathological gamblers and their families. A nonjudgmental attitude is critical in dealing with the harmful consequences of continued gambling.

Pharmacological approaches. There are no FDA-approved medications for pathological gambling. Therefore, when prescribing medications to target pathological gambling, clinicians need to inform their patients of the off-label use of the drug and that the use is based on limited research.

The pursuit of effective medications for pathological gambling has been hindered by clinical trials that report a high placebo response rate, a lack of understanding of pathophysiology, the heterogeneous nature of pathological gambling, and the use of a wide variety of outcome measures.^{21,22} Evidence for the use of medications in treating pathological gambling has been inconclusive.^{23,24}

The dopaminergic system, which influences reward, motivation, reinforcement of reward, and appetitive urges has been implicated in addictive disorders—including pathological gambling.²⁵ In randomized clinical trials, the opiate antagonists, naltrexone and nalmefene, have been shown to reduce gambling urges, thoughts of gambling, and behaviors in primary pathological gamblers but not in pathological gamblers with comorbid alcohol abuse.²⁶⁻²⁹

Antidepressants, namely SSRIs, have been tested because pathological gamblers have demonstrated serotonergic dysfunction in the laboratory, which has contributed to possible explanations of impaired disinhibition and impulsivity. Data from clinical trials in which SSRIs have been used to treat pathological gamblers have not been conclusive: some trials have found moderate reductions in gambling while others have not been able to find a significant response.³⁰ One trial showed bupropion to be as effective as naltrexone in pathological gamblers, but other trials have not been able to show efficacy greater than that with placebo.³¹⁻³³

Mood stabilizers have also been examined for the management of pathological gambling because of the high co-occurrence of bipolar disorder and dysfunctional impulsivity in pathological gamblers. To date, lithium, divalproex, carbamazepine, and topiramate have been tested.³⁴ In a double-blind placebo-controlled study of 40 pathological gamblers who had bipolar spectrum disorders (bipolar II disorder, bipolar not otherwise specified, or cyclothymia), sustained-release lithium carbonate (mean lithium blood level of 0.87 mEq/L) was superior to placebo in reducing pathological gambling symptoms during 10 weeks of treatment.³⁵

Olanzapine was examined in 2 clinical trials in nonpsychotic nonbipolar participants, but no significant treatment effect was reported for pathological gambling.^{36,37} Recently, there was a case report of beneficial effects of quetiapine in a patient with Parkinson disease and pathological gambling, but there have not been any follow-up studies.³⁸

In the past few years, trials with unique agents, such as N-acetylcysteine and modafinil, have shown interesting preliminary data, but replication and further testing are required.^{39,40} N-acetylcysteine, a glutamatergic modulator, is thought to mediate learning in the reward pathway. The mechanism of action for modafinil remains incompletely understood, but it is thought to involve dopamine regulation by blocking dopamine transporters and thereby attention and executive functioning.⁴¹ Ongoing trials of memantine, acamprosate, and topiramate that will provide new insights into the specific targets of medications are being conducted in pathological gamblers.

Currently, only 30 states offer publicly funded gambling treatment (despite gambling being legal in every state except Hawaii and Utah). Similar to certifying bodies that

administer alcohol and drug treatment certifications, there are certifying bodies that administer gambling counselor certifications. Intensive outpatient programs and residential treatment programs exist specifically for pathological gamblers, but many are prohibitively expensive and/or have little documentation and evaluation of clinical services.

Short- and long-term monitoring

No objective measure of gambling engagement, such as a urine drug screen, exists for pathological gamblers. Self-report is obviously unreliable. Collateral information, review of financial statements, assessment of life domains (work, medical health, emotional health, social capital, financial, legal, and family functioning) and the patient's therapy adherence/retention are the best treatment indicators.⁴²

As with those with addictive disorders, pathological gamblers require ongoing monitoring. Significant damage and harm can occur instantly when relapse occurs. In general, patients who have been stable for more than a year and who are no longer experiencing any harmful consequences from gambling can be monitored less frequently.

Conclusions

Pathological gambling is a common psychiatric condition that can present with a variety of symptoms. Addressing problem gambling requires full attention to all aspects of the bio-psychosocial perspective. Even though there are no FDA-approved medications or standard treatment guidelines, there are a variety of treatment options available for pathological gamblers and their families (Table 2). As with addictive disorders, engagement and retention of gamblers in treatment will lead to improved outcomes. The next 5 years are also likely to see an emergence of newer technologies and psychotherapeutic techniques that will increase the treatment armamentarium for pathological gambling.

